Epitomes

Important Advances in Clinical Medicine

Obstetrics and Gynecology

The Scientific Board of the California Medical Association presents the following inventory of items of progress in obstetrics and gynecology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist busy practitioners, students, research workers or scholars to stay abreast of these items of progress in obstetrics and gynecology that have recently achieved a substantial degree of authoritative acceptance, whether in their own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Obstetrics and Gynecology of the California Medical Association and the summaries were prepared under its direction.

Reprint requests to Division of Scientific and Educational Activities,
California Medical Association, 44 Gough Street, San Francisco, CA 94103

The NORPLANT Contraceptive System

HORMONAL IMPLANTS for long-term contraception have been studied since 1967. After trials of numerous steroids and delivery systems, it now appears that the NORPLANT system, developed by the Population Council, will be suitable for many women of reproductive age.

The active ingredient is the progestin levonorgestrel, which has been used in certain oral contraceptive formulations for many years. In the NORPLANT system it is continually released into a woman's tissues, and ultimately the bloodstream, from six silastic capsules implanted subdermally into the upper arm and remains effective for at least five years. Its contraceptive action is threefold: inhibiting ovulation (in about 50% of cycles), thickening cervical mucus and suppressing endometrial activity.

Field trials now cover more than 50,000 woman-months of use. Its efficacy is roughly comparable to that of tubal sterilization. In a four-year clinical study by Sivin, the annual pregnancy rate was generally below 0.5 per 100 woman-years and the cumulative five-year pregnancy rate in 992 initial acceptors was 2.7 per 100 continuing users. Fertility promptly returns following removal.

While a newer two-capsule version is undergoing field trials, the six-capsule NORPLANT is likely to achieve approval by the Food and Drug Administration (FDA) earlier because of its lengthier period of study. The six-capsule formulation has been approved for distribution in Finland, where a manufacturer (Leiras) has been licensed. FDA approval is under consideration but the method is not yet approved for use in the United States.

As with all contraceptives based on continuous administration of a progestin, women using NORPLANT frequently experience irregular menses and occasionally intermenstrual spotting or amenorrhea. Break-through bleeding, while considered intolerable by some women, is seldom serious and tends to diminish after the first three to six months. Other side effects usually attributable to steroid contraception occur but tend to be less frequent and severe than with oral steroids because of the low daily dose released by the implants.

DONALD MINKLER, MD
Berkeley, California

REFERENCES

Diaz S, Pavez M, Miranda P, et al: A five-year clinical trial of levonorgestrel silastic implants (NORPLANT). Contraception 1982 May; 25:447-456

Segal SJ: The development of NORPLANT implants. Stud Fam Plann 1983 Jun-Jul; 14:159-163

Sivin I, Diaz S, Holma P, et al: A four-year clinical study of NORPLANT implants. Stud Fam Plann 1983 Jun-Jul; 14:184-191

External Cephalic Version

THE USE OF EXTERNAL CEPHALIC VERSION underwent a significant reduction in the early 1970s. Since then, the management of breech presentation at or near term has been by cesarean section and, in selected cases, by vaginal breech delivery. Despite correcting for congenital anomalies, the morbidity and mortality rates for breech deliveries have remained higher for those neonates delivered vaginally than for those delivered by cesarean section. Risks incurred with a vaginal breech birth include umbilical cord prolapse, entrapment of the aftercoming head and birth trauma. Although the alternative of doing a cesarean section for each breech presen-